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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,829	06/28/2001	Raja Krishnaswamy	MS174293.1	5228

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EXAMINER

EL HADY, NABIL M

ART UNIT PAPER NUMBER

2154

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,829

Applicant(s)

KRISHNASWAMY ET AL.

Examiner

Nabil M El-Hady

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 1-27 are presented for examination.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen et al. (6,324,543), hereinafter "Cohen".
4. As per claim 1, Cohen discusses a system for interacting with an object (col. 2, lines 32), the system comprising: a method call interceptor (col. 2, lines 1-5; col. 3, lines 57-63, proxy B'), operable to intercept a method call to an object and to route the method call to a proxy (col. 2, lines 1-5; col. 3, lines 57-63, proxy B"), the method call interceptor accessible to application code (e.g. col. 2, lines 1-10); and an application code generic proxy operable to receive an intercepted method call (col. 2, lines 1-5; col. 3, lines 57-63, proxy B"), the application code generic proxy further operable to invoke a method on the object (method foo()) of col. 3, lines 34-62; and col. 7, lines 7-9), to receive results from the object and to pass results to the entity that generated the intercepted method call (col. 3, line 61; and e.g. col. 7, lines 1-12).
5. As per claim 14, the claim is rejected for the same reasons as claim 1 above.
6. As per claim 15, the claim is rejected for the same reasons as claim 1 above.
7. As per claim 23, the claim is rejected for the same reasons as claim 1 above.

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8. As per claim 27, the claim is rejected for the same reasons as claim 1 above.
9. As per claim 24, the claim is rejected for the same reasons as claim 1 above. In addition, it is inherent in Cohen's disclosure that data packets transmitted between computer processes comprise identifier/value pair providing information associated with an intercepted method call on an object.
10. As per claims 2 and 20, Cohen discloses the object is located across a remoting boundary (e.g. col. 2, lines 1-10).
11. As per claims 3 and 21, Cohen discloses the object is marshaled by reference (e.g. col. 5, lines 61-67).
12. As per claims 4 and 22, Cohn discloses the object is marshaled by value (e.g. col. 1, lines 24-32; in the preferred embodiment Cohen uses Java to create and instantiate the objects, it is an inherent property of Java to marshal objects by value).
13. As per claim 5, Cohen discloses the method call interceptor is operable to populate a call information data store with information associated with the intercepted method call, the call information data store accessible to the application code generic proxy (e.g. col. 6, lines 62-67).
14. As per claims 6 and 25, Cohen discloses populating the call information data store with at least one of a method name, one or more input parameters, a count of the number of input parameters, one or more type identifiers associated with the input parameters, a count of the

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number of return parameters for the method call, one or more type identifiers associated with the return parameters, class/interface defining method data, a stack pointer and a heap pointer (e.g. col. 7, lines 1-17).

15. As per claims 7 and 26, Cohen discloses the call information data store is a message object that can be serialized and passed across a remoting boundary (e.g. col. 7, lines 40-60).

16. As per claim 8, Cohen discloses the method call interceptor is operable to transfer control to a method in the application code generic proxy, where the method in the application code generic proxy overrides a base class method defined in a base class object from which the application code generic proxy inherits (e.g. col. 9, lines 1-20).

17. As per claims 9 and 16, Cohen discloses the application code generic proxy is operable to perform proxy pre-processing before invoking the method on the object (e.g. col. 6, lines 57-67).

18. As per claims 10 and 17, Cohen discloses the proxy pre-processing comprises at least one of load-balancing, transaction processing, object migration, object persisting, monitoring remote method calls, caching remote data, controlling remote method call invocations and machine learning involved in optimizing remote method call invocation (e.g. col. 5, lines 61-67).

19. As per claims 11 and 18, Cohen discloses the application code generic proxy is operable to perform proxy post-processing after receiving the results from the object (e.g. col. 7, lines 8-16).

20. As per claims 12 and 19, Cohen discloses the proxy-processing comprises at least one of auditing, transaction processing, object migration, object persisting, monitoring remote method calls, caching local data, caching remote data, controlling remote method call invocations and machine learning involved in optimizing remote method call invocation (e.g. col. 7, lines 8-12).

21. As per claim 13, Cohen discloses the application code generic proxy invokes the method on the object by invoking a method available in a remoting infrastructure (e.g. col. 8, lines 18-23).

22. Applicant's arguments filed 5/11/2004 have been fully considered but they are not persuasive. Therefore rejection of claims 1-27 is maintained.

23. In the remarks, applicants argued in substance that (1), Cohen does not disclose a method call interceptor rather, he discloses a generated proxy intercepts the call method; (2) Cohen does not teach or suggest the application code generic proxy operable to receive an intercepted method call; (3) Cohen does not teach invoking a method on an object by the application code generic proxy.

24. Examiner respectfully traverses applicants' remarks. As to point (1), as explained above in the rejection of the claims, Cohen discloses a method call interceptor (designated as the local generated proxy e.g. B' in col. 3, lines 57-63, proxy B'). As to point (2), Cohen discloses the application code generic proxy (col. 3, lines 57-63, proxy B"), operable to receive an intercepted method call (col. 3, lines 59-60). As to point (3), Cohen discloses invoking a method on an

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object by the application code generic proxy (method foo()) of col. 3, lines 34-62; and col. 7, lines 7-9).

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (703) 308-7990. The examiner can normally be reached on 9:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 20, 2004



Nabil El-Hady, Ph.D, M.B.A.
Primary Patent Examiner
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